Document Conversion

Organization Structure and Process

NASA/FAA OPERATING DOCUMENTS WORKSHOP IV

Structuring Operating Information: Tools and Techniques

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JOURNEY TO A VISION

- **From a Basic/Eclectic/Dysfunctional System**

    - Steps along the way:

        » Hitting the Wall
        » Champion
        » Learning Disabilities and Self Assessment
        » Overcome mental models
        » Create the Vision
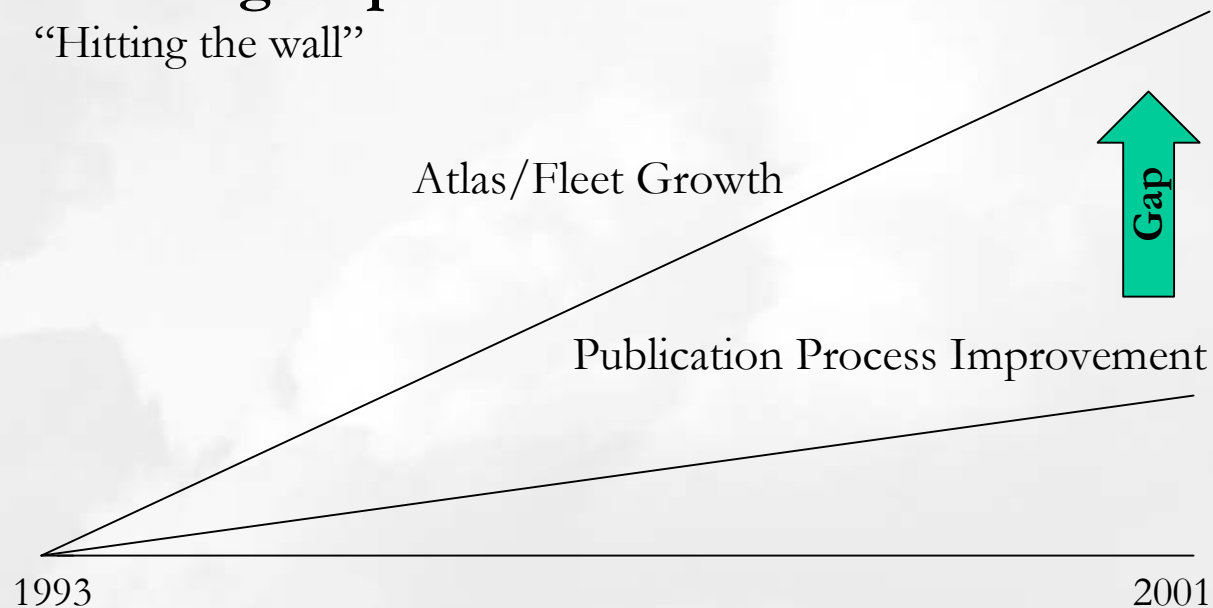   » Build the Plan
        » Implement the Plan

- **To a Visionary System**

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PUBLICATIONS HISTORY: A CONTINUUM

Widening Gap

"Hitting the wall"

Atlas/Fleet Growth

Gap

Publication Process Improvement

1993

2001

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LEARNING DISABILITIES*

- We have them all

  - "I am my position" - responsibilities limited to the boundary of my position
  - The Enemy is out there - finding someone or something to blame
  - The Illusion of taking charge - proactiveness - reactiveness in disguise?
  - The fixation on events - primary threats are from slow, gradual processes
  - The parable of the frog - becoming more and more dysfunctional
  - The delusion of learning from experience - creating 'silos' and 'fiefdoms'
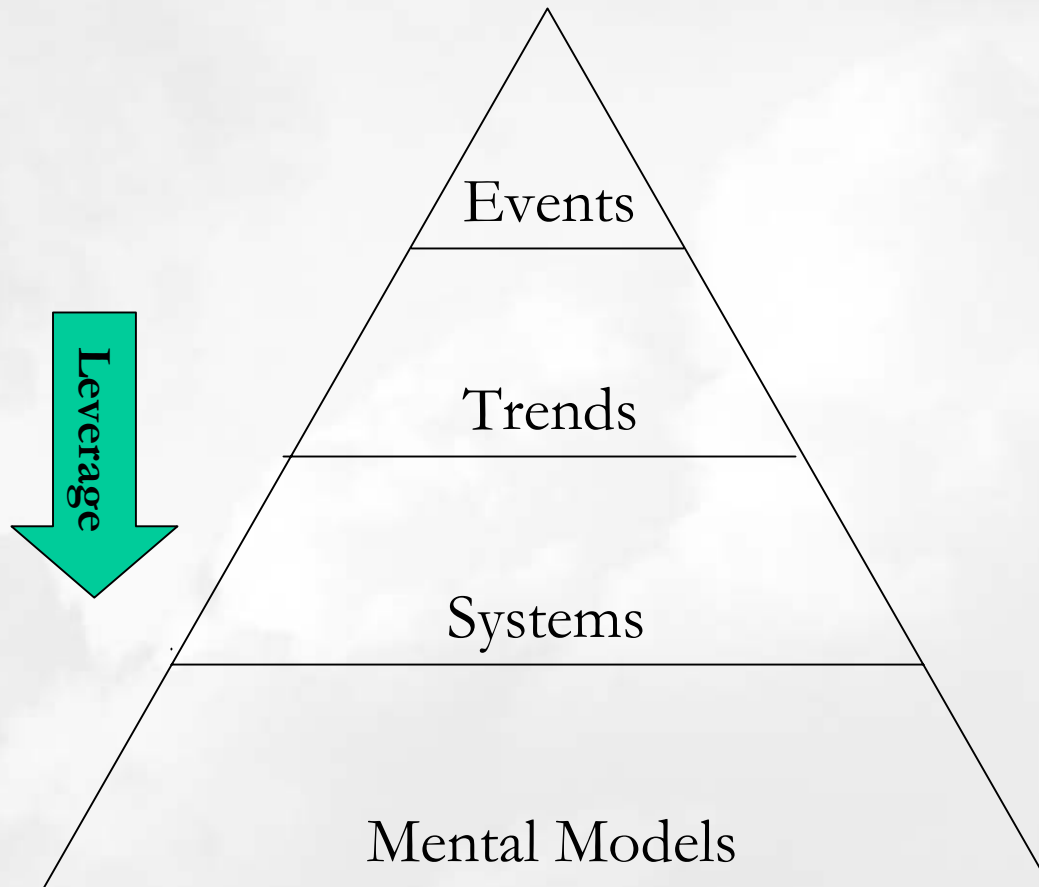
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SELF ASSESSMENT

- Findings:
  - Different departments independently producing and revising manuals
  - Different departments following different approval processes
  - No basic style guides for the company or the departments
  - Limited interdepartmental coordination of changes
  - No two departments using the same word processing software
  - No two people in the same department using the same software
  - Limited tracking systems as to revision status
  - Publications were produced by copying methods
  - Cut and paste common - often no electronic files at all
  - Redundant distribution systems for aircraft publication supplies
  - Limited general accountability or cost controls
- **Creating the Leverage** Comes from **New Ways of Thinking**

APPLYING THE LEVERAGE

Events

Trends

Systems

Mental Models

Leverage

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FUTURE STATES: The Vision

- All electronic/digital manuals (flt ops, mx, gnd ops, HR, Legal, etc.)
- Web delivery of all documents and forms
- Full electronic document sets for aircraft operations and servicing
- Direct link capability to all flight crews via electronic means
- Direct link capability to all aircraft for data up and downloads
- Complete integration and interactivity between and among documents
- Ability to simultaneously revise and update complementary documents
- Maintain state of the art document processes and systems

FUTURE STATES: The Fundamentals

- Creation of the Document Services Department

- Establishment of a multi-departmental "Core Team"

- Focus energy, develop patience, and view reality objectively

- Create a shared vision

- Overcome mental models of publication's departments and processes

- Develop team learning by creatively thinking together

- Analyze development from a systems thinking perspective

- Continuous pursuit of state of the art improvements

BUILD THE PLAN

- Build a matrix of all publications to assess their current status
- Assess the extent to which manuals (which ones) need to be interrelated
- Establish the depth to which manuals need to be tagged
- Conduct content analyses to develop DTDs and style guides
- Develop enterprise-wide layouts, formats and style guides
- Establish a set of priorities with respect to urgency, frequency of use, etc.
- Establish a conversion plan based on priorities

IMPLEMENTING THE PLAN: First Steps

- Systematically begin the conversion process according to the plan

- Atlas is presently converting 25 - 30 manuals to a digital format

- Conversions from hardcopy, from Word (several versions), WordPerfect, MacIntosh W-P, and an assortment of graphics and spreadsheet software

- Approximately 115 manuals initially consolidated into the Document Services Department in various media and formats

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IMPLEMENTING THE PLAN: Next Steps

- Converting digital manuals to PDF for Web deployment

- Acquisition and implementation of a document management system

- Development of full suite of DTDs as appropriate in conformance with ATA standard specifications

- Support development of ATA specifications for operation's manuals

- Systematic conversion of manuals to FrameMaker with XML tagging

- Creation of a comprehensive content data base to support the inter-linking of manuals to replace individual independent manual files

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IMPLEMENTING THE PLAN: Final Steps

- Deploy manuals (as appropriate) around the world via the web to:
    - Aircrews
    - Aircraft
    - Maintenance crews
    - Ground crews
    - Vendors and crews
    - Customers
    - FAA
- Active hyper-linking via the web between and among all appropriate manuals for:
    - Training center
    - Dispatch and operations control

WHAT WE ARE LEARNING

- **This is a journey - not a destination**

- Technology has enabled potential quantum process improvements
- There will be continual change
- We must continually evaluate technological improvements

- Be keenly aware of our mental models and their impact on our thinking
- We need to be smart - one size does not fit all
- We have learned a lot from each other

- **Atlas Air wants to thank all of you who have helped along the way**

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